

## ABSTRACT

This invention concerns a two-stroke cycle engine, more specially it concerns a two-stroke cycle engine using a preceding air-layer for scavenging. It has a scavenger passage connected to a branching scavenger passage opened to said scavenging port. The engine has a connecting passage to link the air passage and the fuel passages so that negative pressure in the air passage forces the fuel-air mixture in the fuel passage into said air passage. Further, the engine according to this invention has a removable guide with a surface forming a curved smooth channel which is attachable to the scavenger passage in the crankcase from the mounting surface, and forms a portion of said scavenger passage with the curved channel. The blow-up angle of the scavenger passage varies along the circumferential direction of the cylinder. The crankcase is configured in such a way that the front and rear portions, which are separated by a block, and a scavenger passage is provided inside both said front and rear portions of said crankcase, and the cylinder. The air cleaner has two air passages running from it in parallel, the first one is connected to said air passage, and the second one is connected to the air inlet of the carburetor to provide air for the fuel passage, and a choke valve on the air cleaner is provided to open and close both of the first and second air passages.